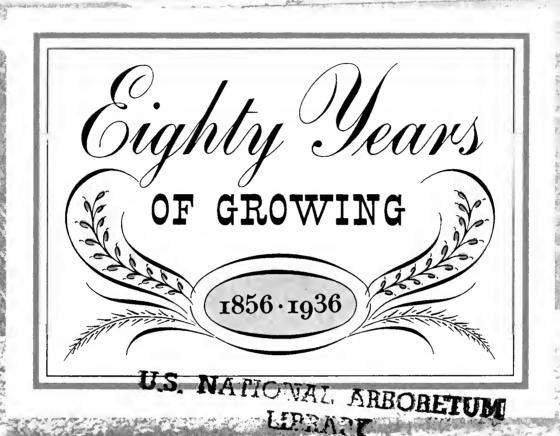
Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.





OCT 2.3 1979







"These things are to be understood before you sow your seed, which is the origin of vegetation"

MARCUS TERENTIUS VARRO
116-27 B.C.

人



Eighty Gears

OF GROWING

 $\mathbf{1856} \cdot \mathbf{1936}$

COMMEMORATING

THE EIGHTIETH ANNIVERSARY

OF THE FERRY-MORSE SEED CO. IN THE

CONTINUOUS BREEDING

AND GROWING

OF PUREBRED SEEDS

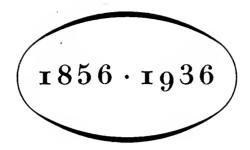
AND THE DEVELOPMENT

OF AN INTERNATIONAL BUSINESS

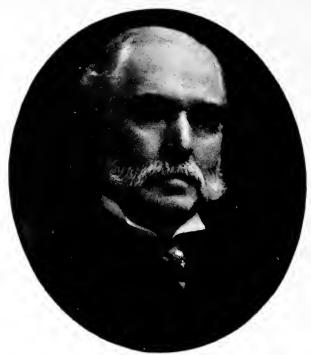
Ferry=Morse Seed Co.

DETROIT · · SAN FRANCISCO





HE year 1936 marks the eightieth anniversary of the Ferry-Morse Seed Co. Eighty years is a long time. Eighty years ago, no letter boxes were on the streets of New York. Horse-drawn omnibuses passed under flaring gas lights; the telegraph linked only the larger centers; the telephone was unknown. Travel was slow and hazardous. The migration from the East to the Middle West and Far West had begun only a few years before. Vigilance committees were maintaining law and order in California. New towns were springing up rapidly in the Middle West, following the advance of the railroads. Settlers brought their families and belongings from the East and hewed out homes for themselves in these new territories. Gardens were a necessity, but garden space could be cleared only with considerable difficulty. Seeds for gardening purposes were scarce. The seeds planted in these virgin gardens either had been saved carefully from previous years or were obtained from a few seed companies who imported most of their supplies from European countries. Neighbors exchanged seeds with each other. The commercial growing of garden seeds in the United States was in its infancy.



D. M. FERRY, FOUNDER OF

D.M. Ferry V. Co.

N 1852, Dexter Mason Ferry came to Detroit from New York State with the intention of earning enough money to go to college. He obtained a job in S. Dow Elwood's bookstore, and in his spare time studied bookkeeping. Soon, he had two jobs—one selling books during the day, the other keeping books at night for M. T. Gardner & Co., a small seed house. He earned the large sum of \$800 a year, leaving his seed house salary with the partnership, at interest. In 1856, he became a partner. The name was changed to Gardner, Ferry & Church, then to Ferry, Church & Co. In 1867, D. M. Ferry, with C. C. Bowen, whom he had met as a competitor, and H. K. White took over the business and established it as D. M. Ferry & Co.

From the beginning, D. M. Ferry realized that, since the merit of seeds could not be determined by their appearance, gardeners would have to depend largely for their protection on the reputation of the seedsmen from whom they bought. He believed also that gardening could be properly encouraged only if reliable seeds were readily available to home gardeners. Spurred on by these convictions, he planned to place in the stores of dealers throughout the country assortments of the best seeds obtainable, put up in packets. Thus began the "commission box" business of D. M. Ferry & Co.

The packet seed business was small, at first. Only about five hundred assortments were sent out the first year. The packets were poorly illustrated and badly printed, according to present-day standards, but the descriptions always were accurate and the seeds were of the highest quality. The business grew so rapidly that in a few years home gardeners everywhere in the United States knew and demanded Ferry's Seeds.

The quarters originally occupied by M. T. Gardner & Co. soon became too small, and in 1864 the company moved to a larger building on Woodward Avenue. This, in turn, proved too small, and in 1885 a large warehouse and office building was erected at Brush and Monroe streets.

Then, on New Year's Day, 1886, came the great Ferry fire—Detroit's largest fire since the town's burning in 1805. The warehouse was filled with seeds. Once started, the flames quickly became uncontrollable, devouring the entire contents of the building. The fire smouldered for more than a month, over a million dollars' worth of seeds being consumed.

Undismayed, the company rented a skating rink, rushed orders for additional supplies, and made new seed tests. Not an order had to be canceled. The year so disastrously begun ended with more dealer-customers than the year before. A larger warehouse was erected on the old site.

The business continued to grow. As the population of the country increased, not only were more packet seed assortments sent out but the bulk seed business of the company expanded steadily. The number of gardeners growing vegetables for market increased rapidly. The canning industry, with its large acreage of vegetables, came into prominence. These industries required large quantities of Ferry's Seeds.

The acreage in Detroit devoted to trial grounds and stock seed growing soon became inadequate. These activities were moved to Pontiac and later to a much larger acreage at Oakview, near Rochester, Michigan. More warehouse space became necessary. Additional warehouses were built, until finally nineteen and one half acres of floor space were used in operation of the business.

In 1907, D. M. Ferry died, leaving as a monument to his vision and inexhaustible energy the largest garden seed business in the world. Lem W. Bowen, son of C. C. Bowen, one of the original incorporators of the company, succeeded to the presidency and continued in this capacity until his death, in 1925. D. M. Ferry, Jr., vice-president under Mr. Bowen, then assumed the presidency.



C. C. MORSE, FOUNDER OF

C. C. Morse & Co.

'N 1859, an eighteen-year-old lad, Charles Copeland Morse, left his home, in Maine, journeyed to an eastern seaport, and took ship for California, by L way of Panama, in search of his fortune. He arrived at Santa Clara in 1862, found the climate and soil conditions to his liking, and decided to settle there. He eventually obtained a job. Having inherited a thrifty nature from his New England ancestry, he saved his money and kept on the lookout for a chance to go into business. The opportunity soon came. A man named R. W. Wilson, who had been growing seeds for a number of years near Rochester, New York, came to Santa Clara for his health. It was natural that he should investigate the possibilities of the locality for seed production, and, having found suitable land, he became the first commercial seed grower in California. He continued to sell his former eastern customers, among whom were D. M. Ferry & Co. Mr. Wilson's health did not improve as he had hoped, and in 1877 he sold his business to Kellogg & Morse. Kellogg retired in 1888, and C. C. Morse then operated alone under the name of C. C. Morse & Co., and later in 1896 incorporated under the laws of the State of California.

When Mr. Morse purchased the business from R. W. Wilson, about one hundred acres were planted to seed crops. The business prospered, and soon one

thousand acres were devoted to seed production. The business continued to expand as more varieties of vegetable and flower seeds were grown.

The health of Mr. C. C. Morse failed in 1898, and his son, Lester L. Morse, who had been associated with his father for a number of years, assumed the management. He continued to devote the greater part of his time to the improvement of the then-existing strains of vegetable and flower seeds and to the development of many new types, notably in lettuce, onions, and carrots, and in sweet peas and other flowers. Field notes on these subjects compiled by him are recognized standards of authority, both in the United States and abroad.

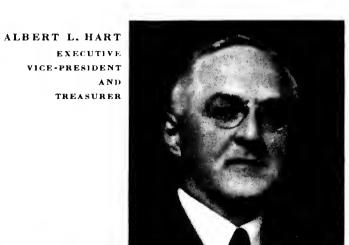
In 1900, Mr. C. C. Morse died, and Lester L. Morse succeeded him as president of the company. Up to the year 1905, C. C. Morse & Co. had been exclusively seed growers for the general seed trade; but, desiring to expand their operations, purchased in 1905 the business of E. J. Bowen, who had recently died. Mr. Bowen was a brother of C. C. Bowen of the original Ferry firm and was one of the pioneer seedsmen of the Pacific coast. Following this purchase, the headquarters of the company were moved from Santa Clara to the premises formerly occupied by E. J. Bowen in San Francisco. On April 18, 1906 came the earthquake and fire which destroyed the major portion of the business district of San Francisco, including the recently occupied premises of C. C. Morse & Co. For a brief period the company again operated from their old headquarters in Santa Clara, but on June 1, 1906, just forty-four days after the fire started, the company was back in San Francisco in a temporary building, and continued at this location until the fall of 1907, when one of the first permanent buildings in the business district was available. Later, needing larger quarters, the company occupied its present building, at 749 Front Street.

In 1907, C. C. Morse & Co. purchased the business of the Cox Seed & Plant Company, an old, well-established jobbing, commission packet, and retail business, and it was through this purchase that the firm entered the commission packet business on the Pacific coast, which branch of the business was eventually sold to D. M. Ferry & Co., in 1921. As the seed-growing operations of C. C. Morse & Co. expanded, additional acreage became necessary; and after trying several localities the company, in 1910, finally centralized their seed-growing operations by purchasing the farm at San Juan Bautista and other land in the vicinity. A few years later, the Sacramento River Ranch was acquired; then, the Salinas property, where most of the California seed-breeding operations are now centered.

PRESENT OFFICERS OF FERRY-MORSE SEED CO.



D. M. FERRY, JR. . PRESIDENT





HARRY H. HOBBS VICE-PRESIDENT







FRANK G.
CUTHBERTSON
VICE-PRESIDENT



LESTER L. MORSE · FIRST VICE-PRESIDENT

FERRY-MORSE SEED CO.

TLSON'S first crop in California, a small acreage of Prize Head lettuce, had been grown for D. M. Ferry & Co. His successors, Kellogg & Morse, continued to supply D. M. Ferry & Co. When C. C. Morse became sole owner of the business, he entered into a relationship with D. M. Ferry & Co. which was to endure without interruption for more than a half century.

It became increasingly evident—as the commercial growing of vegetables in the South and West developed on a huge scale, the canning industry expanded rapidly, and the number of dealer outlets increased—that a combination of the merchandising and growing facilities of D. M. Ferry & Co. and the breeding and growing equipment of C. C. Morse & Co. was eminently desirable. It was a natural evolution that, in 1930, these two large companies should combine activities. The merger made the Ferry-Morse Seed Co. not only the largest merchandisers but the largest breeders and growers of garden seeds in the world.



A field of radish in the blossom stage at Salinas

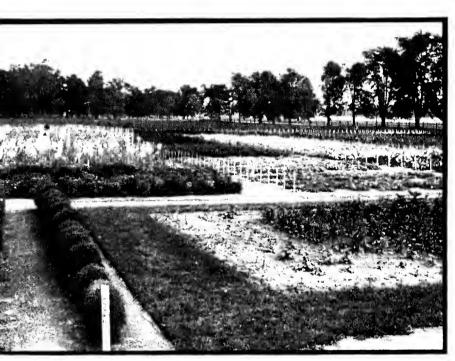


A field of lettuce in full flower at the Sacramento Ranch



A field of carrot in blossom at the Sacramento Ranch. Two months after this picture was taken, the plants were pulled up, dried on sheets, and threshed

Airplane view of Detroit offices and warehouses

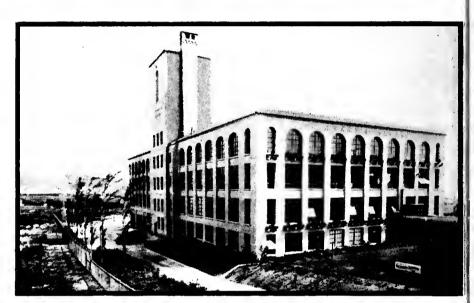


A portion of the trial grounds at Oakview

FAR-FLUNG



The San Francisco offices and warehouse at 749 Front Street

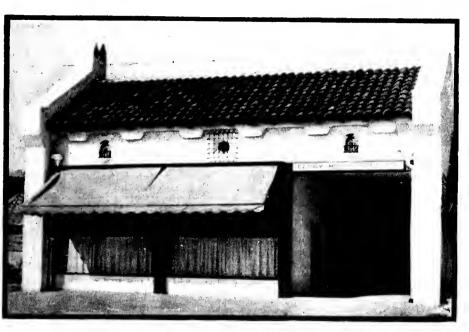


The offices and warehouse at 500 Paul Avenue, San Francisco, devoted to the Pacific coast commission packet business



A view of the greenhouses at the Oakview Seed Breeding Station

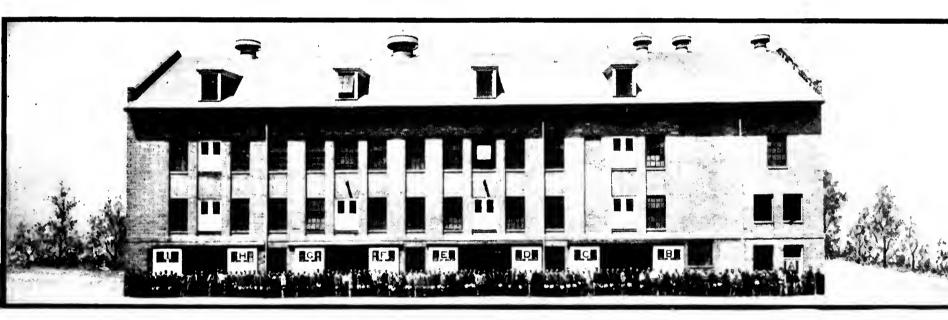
ADVANTAGES



Headquarters of the Sacramento River Ranch



Headquarters buildings at San Juan Bautista. The Pacific coast farming operations are centered here



The dryhouse at Oakview. The men in the foreground are salesmen attending a sales conference



A view of the Salinas Seed Breeding Station

THE COMMISSION PACKET SEED BUSINESS OF FERRY-MORSE SEED CO.

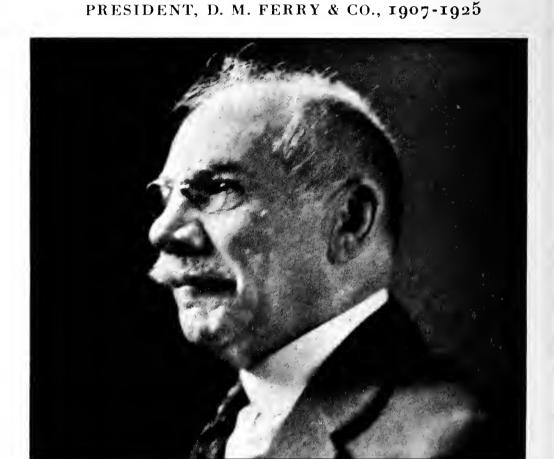
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UT few business concerns have the interesting history which is that of the Ferry-Morse commission packet business. Beginning with about five hundred assortments, in 1856, the company pushed out rapidly into a constantly widening range of territory. As

people migrated west and new towns sprang up, the Ferry salesmen followed. They traveled under difficulties—trains some of the time. teams of horses much of the time. on horseback often. They forded streams, walked long distances, went into sections where their visits were an event, slept where they could. Some of them went into boom mining towns, saw Indian raids and battles with outlaws. Many who traveled the same territory for years saw sections which had been barren waste transformed into well-ordered garden plots.

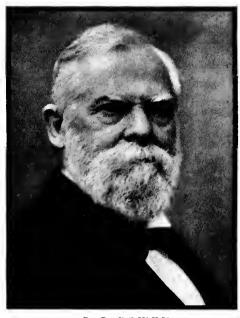
Today, one hundred and fifty Ferry-Morse salesmen travel approximately two million miles annually in automobiles, but some of them still have to use the old methods of locomotion occasionally.

The first packets sent out were crude affairs; the larger packages of peas, beans, and corn were tied with string; displays were rough wooden boxes. Today, packets and cartons are beautifully illustrated. They are packed in attractive red-and-silver displays-modern, colorful, sanitary, a desirable addition to the most modern store.

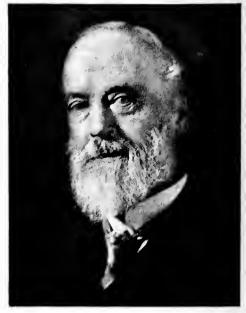


LEM W. BOWEN

CO-INCORPORATORS WITH D. M. FERRY OF D. M. FERRY & CO.



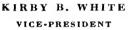
C. C. BOWEN



H. K. WHITE

FORMER OFFICERS OF FERRY-MORSE SEED CO.







EDGAR W. BOWEN VICE-PRESIDENT



JULIAN P. BOWEN
VICE-PRESIDENT AND TREASURER

The old time general store, where but few articles in addition to Ferry's Seeds were attractively displayed, has given way to the effectively equipped department, general, hardware, variety, florist, grocery, and drug stores in all of which Ferry-Morse Seeds are displayed.

Factory methods, too, have changed. In the old days, women filled the packets by hand, many of them achieving what seemed astonishing speed. Displays were filled by picking the packets out of bins. Today, packets are made, filled, sealed, and stamped with the year for which put up, by batteries of machines; displays are filled from a continuous overhead conveyor nine hundred feet long; the filled displays are sent along a conveyor to be sealed, down a



Supreme Marglobe tomatoes growing at Oakview



Another view of the Salinas Seed Breeding Station. Each cage in the foreground contains a single plant, selected because of its ideal characteristics

gravity chute to waiting trucks. More than one million packets and cartons are picked out daily during the packing season.

But the old rules are still as rigidly enforced as in the early days of the business. The seeds put into packets and cartons meet the high standards set; the filling and packing operations are checked with the greatest care; packets are not sent out for sale a second season. So it is that specially built machines are at work day after day during each fall and winter, tearing up every unsold packet and carton returned by dealers. The seeds are carefully segregated and tested. If they meet the high standards imposed by the company, they are used again; if not,

they are burned, used for feed or fertilizer, sold to pharmaceutical concerns. That perennial question, "What do you do with the old seeds?" is answered thousands of times each year by Ferry-Morse salesmen.

The founders of the business believed that in the last analysis the home gardener would have to depend largely for his protection upon the reputation of the firm whose name was on the packet of seeds he purchased. Two hundred thousand Ferry-Morse displays in stores in the United States, Alaska, Hawaii, and Mexico attest the degree to which the Ferry-Morse Seed Co. has furnished that protection.



In the early days of the commission packet business. A Ferry representative, David Copeland, in 1879, just after trading his saddle for a sleigh



COMPARING THE OLD AND THE NEW

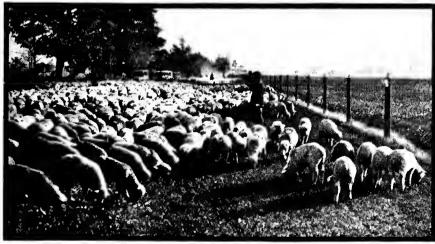
William T. Radcliffe, who entered the employ of D. M. Ferry & Co. in 1871, displaying his equipment of sixty years ago



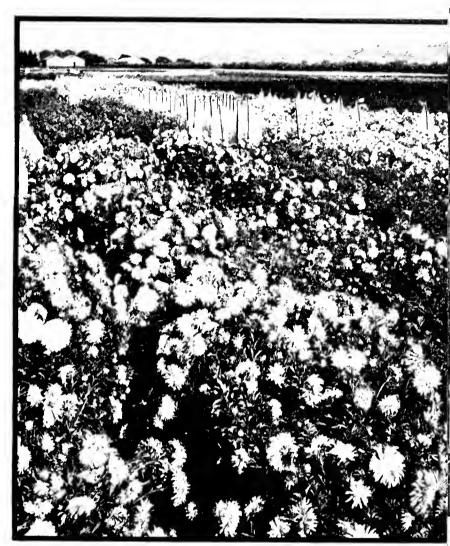
Onion plants bagged separately for pollination control at Oakview. The building in the background is the dryhouse. Note the numbered stakes. Every Ferry-Morse trial bears a number, which is first entered in a book with the varietal name and history of the seed. This information also is entered on a card. At intervals during the growing season, notes are recorded on this card. Finally, a report in complete detail is written and the card filed in a safe in the office of the seed-breeding station. Copies are typed and sent to the Detroit and San Francisco offices



Cabbages in storage at Oakview. Fifty thousand cabbages, each closely approximating the ideal of its kind, are stored each year, under a uniform temperature of 40 degrees Fahrenheit, for the next year's planting for seed



Some of the sheep fattened during the winter at Oakview. These sheep serve a double purpose. They are fed large quantities of old seed unfit for planting purposes, and furnish fertilizer for the farm



Aster "Work Shop" at San Juan Bautista. Note the bags isolating many of the choicest plants



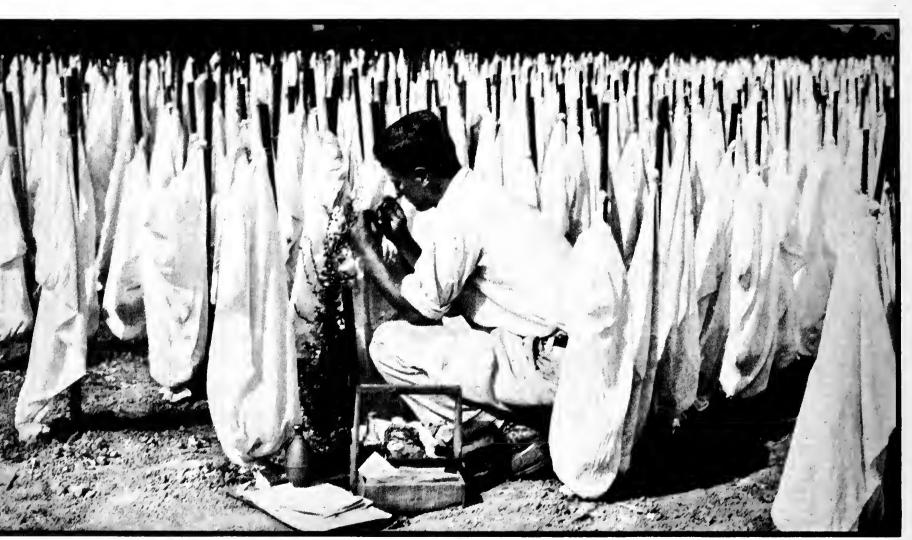
Selecting parsnips for ideal types, at Salinas

THE BULK SEED BUSINESS OF FERRY-MORSE SEED CO.

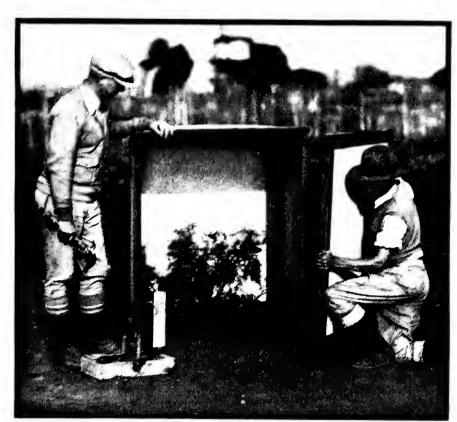
N THE earlier days of the garden seed industry in the United States, sales in bulk were comparatively small. There was no commercial canning of vegetables. Home gardeners purchased such small quantities that bulk sales were not practicable. A limited number of market gardeners grew vegetables for sale around the larger cities in the East and purchased their supplies from the few scattered seed stores then in existence.

As new large centers of population sprang up, the demand for fresh vegetables increased. With increased demand, the number of market gardeners multiplied rapidly. Then came the canning industry. Beginning with peas, beans, and corn, the list of vegetables canned was broadened steadily. Large acreages were planted. The canning industry became a large-scale user of vegetable seeds. Commercial vegetable growers in the South and on the Pacific coast began shipping vegetables to the northern markets. Improved packing and shipping methods were developed. The new industry soon devoted huge acreages in the South and West to the growing of vegetables for northern markets. As these developments progressed, so the bulk seed business of D. M. Ferry & Co. and C. C. Morse & Co. increased.

Before the consolidation, D. M. Ferry & Co. sold largely to dealers and canners; C. C.



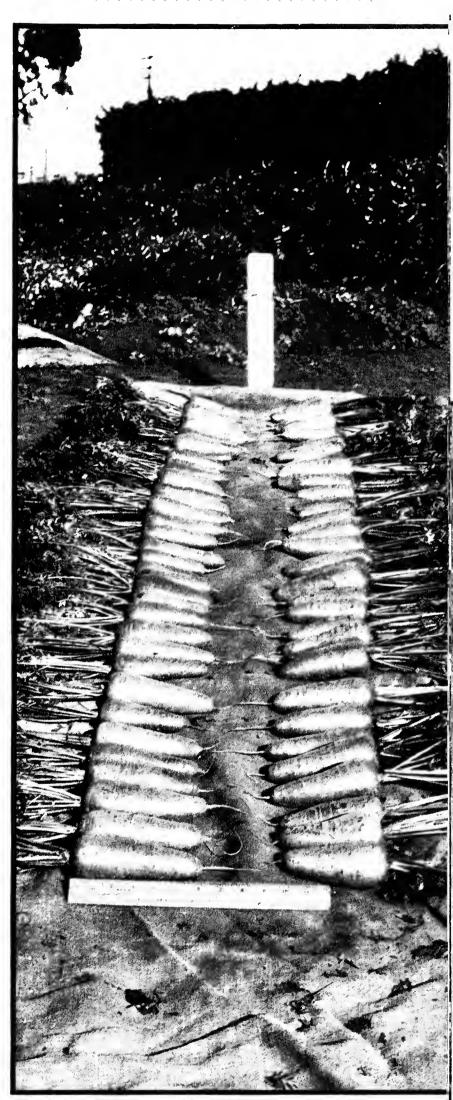
A member of the Salinas Seed Breeding Station staff making a lettuce "cross." He is using sterilized instruments to transfer pollen from a selected lettuce plant to the stigma of this lettuce flower. Each of these bags contains a single lettuce plant



Building a cage about a carrot plant, at Salinas. No pollen from any other flower can reach this plant



Hand pollinating a squash blossom, at Oakview. When a selected male blossom is ripe and a chosen female blossom is ready for pollen, men untie the two flowers, which were bagged separately before each could open, and transfer the pollen with a sterilized instrument



The seed saved from the caged carrot plant shown above produced these carrots. As these roots were practically perfect, they were planted for increase

Morse & Co. to seedsmen throughout the world and to large shippers in this country. Today, Ferry-Morse Seed Co. sell millions of pounds of vegetable and flower seeds in bulk, annually. They sell both vegetable and flower seeds to the seed trade in the United States and most foreign countries, to seed stores and to florists. Large quantities of Ferry-Morse vegetable



Hand pollinating cabbage in the Oakview greenhouses. This is done in the morning, when the flowers are open and fresh and the pollen is fluffy



Resistant Detroit cabbages grown at Oakview. Note the uniformity

seeds are purchased by shippers in the great commercial growing areas, by canners and by dealers supplying the market garden trade. Ferry-Morse salesmen cover every section of the United States.

Commercial operators whose business depends upon the quality of their crops find their best measure of success with Ferry-Morse Seeds.



A bagged female squash blossom at Oakview. Note the fruit already formed at the base of the flower. Squash plants are so large that it is more convenient to bag each individual blossom



Checking color of beets, at Oakview. The color smears on the cards are samples of the beets shown. Not only must the outside of each beet meet the color test but also the inside



Zinnia is one of the most difficult flowers to keep pure. Here, in a large field at Salinas, are three specially selected plants of Orange Lilliput



A corner of the lettuce "Work Shop" at Salinas. The various cultures are divided by screens of sunflowers, so that there can be no mixtures

THE SEED-BREEDING ACTIVITIES OF FERRY-MORSE SEED CO.

HEN Mark Twain called a cauliflower "a cabbage with a college education," he unconsciously paid tribute to the achievements of seed breeders.

From the beginning of their activities in the seed business, D. M. Ferry and C. C. Morse recognized that careful breeding work was essential if the confidence of planters was to be maintained. They established trial grounds and worked painstakingly to improve existing strains. A number of improved strains and new types of vegetables and flowers were developed by the two companies in the early years of their activities, but it was from 1900 on that greatest progress was made.

An Augustinian monk, Mendel, at Brunn, Austria, had been breeding a few vegetables



The natural color of Heavenly Blue Morning Glory is rosypurple. Continued breeding work is necessary to maintain the beautiful sky-blue color



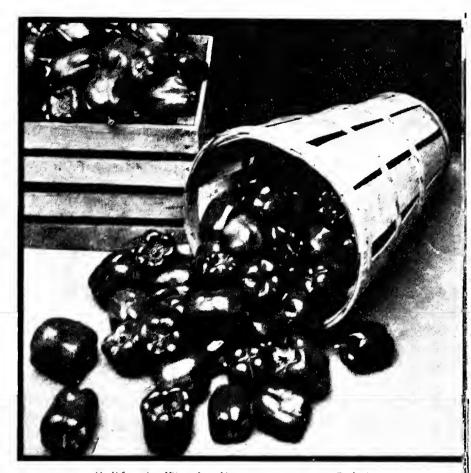
Measuring a typical plant of beauty of Nice stock, at Salinas. This plant will not go to seed, as only single stocks set seed. Breeding a strain of stock that will produce a high percentage of double flowers when seed comes only from single flowers is one of the many problems the seed breeder faces in developing new and more perfect strains



Crystal Apple Cucumbers grown at Salinas. This is a variety popular for many years in Australia. Seed breeders at Oakview and Salinas place varieties from every part of the world in trial



Morse's Market Peas—an ideal variety for shippers



California Wonder Peppers grown at Oakview

and flowers, including peas and sweet peas. He made some discoveries, read a paper about these discoveries before a botanical society, and published his paper in 1865. It occasioned no great comment, but in 1900, years after his death, his paper was found and his discovery of a mechanical basis for determining inheritance which could be applied with mathematical precision immediately recognized as of great significance to seed breeders.



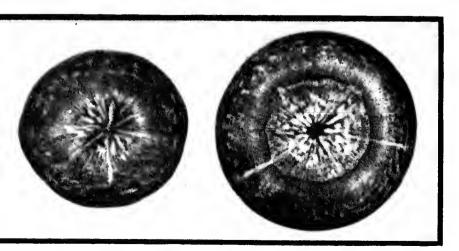
A Ferry-Morse celery trial at Sarasota, Florida

From then on, D. M. Ferry & Co. and C. C. Morse & Co. made great strides in seed-breeding accomplishment and devoted a steadily increasing acreage to the development of new and improved varieties.

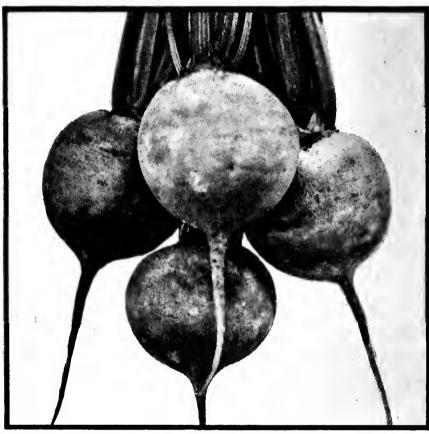
Today, at Oakview, near Rochester, Michigan, eight hundred and fifty acres, and at San Juan Bautista, California, and Salinas, California, more than twelve hundred acres are devoted to trials, breeding work, and the growing of the stock seed necessary to plant the more than



Red Cored Chantenay Carrots. Brilliant orange-red and tender clear through the core. They are a fine example of the accomplishments of Ferry-Morse seed breeders



Danvers Carrot to the right, Red Cored Chantenay to the left; revealing the solidity of color of Red Cored Chantenay



Detroit Dark Red Beet, originated by D. M. Ferry & Co. in 1892.

The best known and most popular variety of beet



Resistant Detroit Cabbage, another Ferry-Morse introduction. Yellows resistant, yet as crisp and tender as if no additional hardiness had been bred into it. A resistant type of Golden Acre

~



Straight-8 Cucumber, a Ferry-Morse introduction; All-America Gold Medal Award, 1934. Uniformly eight inches long. It is not only a splendid home garden variety but is ideal for shipping



Snapdragon "Work Shop" at Salinas. Snapdragons fully resistant to rust are a recent development

fifty thousand acres required annually for seed production by the Ferry-Morse Seed Co. Here, men of long experience, skilled in their vocations, wage a never-ending campaign to keep the many hundreds of varieties true to type, to improve them, if possible, and to find new and better strains. More than fifty thousand germination tests and more than nine thousand trials for purity are made each year. Thousands of single plants, perfect of their kind or with unusual characteristics, are segregated in cages or bags, watched closely, their seed again planted separately, in this continuous hunt for perfection. Every lot of seeds has its history and performance carefully recorded.

The weak and the unfit are ruthlessly discarded. Each operation is planned with meticulous care. Detail maps of all sections of the seed-breeding stations are drawn each year and filed for reference. Even the location of every beehive in surrounding territory is shown, so that the danger of cross-pollination by bees may be avoided.

Here, too, are the type books worked out by Ferry-Morse men, books so valuable that by

request a set was furnished the United States Department of Agriculture. These contain photographs, measurements, accurate descriptions of ideal types of each standard vegetable and flower. For color sureness, color charts handmade by a talented artist and showing with exactitude even the finest gradations of color to be found in vegetables and flowers are used. Thus, Ferry-Morse seed breeders have before them always a clear picture of the ideal.

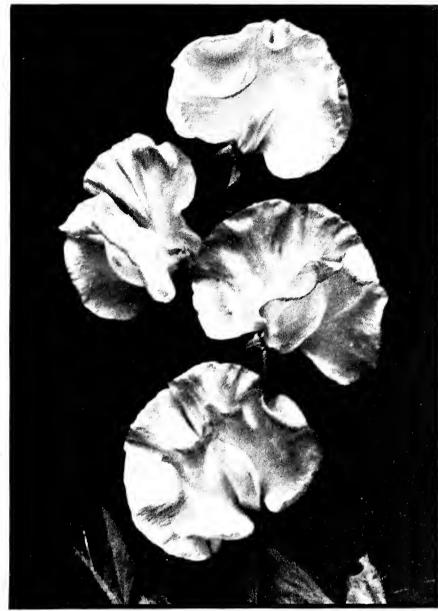
More than that, Ferry-Morse seed breeders have an accurate knowledge of conditions. They talk with canners, inspect their pack; go to the markets and look over incoming shipments of vegetables; spend weeks each year in the great commercial vegetable-growing areas in the South and West, talking with shippers and growers, inspecting crops in the fields, learning at first hand the texture, size, and shape necessary for ideal packing and shipping. The need for an improved type once definitely established, the next step is accomplishment, even though years of development work are required.

Nowhere else in the world is garden seed breeding conducted on as large a scale as at the Ferry-Morse seed-breeding stations.

The "stock seed," from which are grown the seeds marketed throughout the world, is grown only from seeds selected with the greatest care—seeds whose parentage and characteristics



Detasseling corn for Golden Cross Bantam, at Oakview



"Pinkie," introduced by C. C. Morse & Co., in 1928. Because of its vigor, long sturdy stem, and the position of the blossom on the stem, its blood has entered every sweet pea variety developed by Ferry-Morse since its introduction



Sweet pea "Work Shop" at Salinas. In the second generation after crossing, the sweet pea breaks up into many tints and colors, these sometimes including new shades. The most unusual plants are staked individually and the seed of each plant saved separately. In this work, as in all Ferry-Morse breeding work, the Mendelian laws are followed



A field of Pinnacle Sweet Peas at Salinas

are known to approximate the ideal. Seed crops are grown from this "stock seed" on the company's own properties or by growers under the company's supervision. Ninety-seven per cent of all the vegetable and flower seeds sold by the Ferry-Morse Seed Co. are produced directly by them on their own seed farms or under their direct supervision from their own pedigreed strains.

The Ferry-Morse seed-breeding stations at Oakview, Salinas, and San Juan Bautista have three major objectives—to keep the standard varieties of vegetables and flowers true to type, to improve them when possible, and to develop new strains of outstanding value.



Threshing sweet peas at Salinas



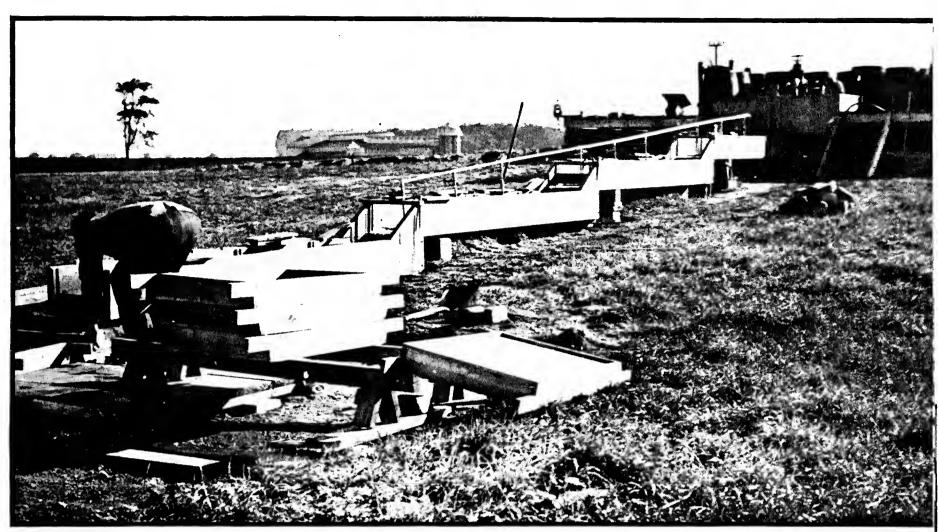
Cleaning lettuce seed in the field at the San Juan Ranch. As much cleaning as possible is done before the lettuce seed is taken to the main cleaning plant



Harvesting carrot seed at the Sacramento River Ranch



Grinding tomatoes at Oakview. Seed and pulp are emptied into waiting barrels



Washing tomato seed in outdoor tanks at Oakview



Sorting carrot roots for seed, at Salinas. Carrots and other root crops take two seasons from the time the seed is planted until the seed is harvested



Tomato trials at Oakview. Regardless of pedigree and heritage, no Ferry-Morse seed crop goes to market without a purity trial

A TYPICAL SERIES OF OPERATIONS



Sorting onion bulbs for seed, at Oakview



An onion seed field at Sacramento



Cutting onion seed heads from stalks, at Sacramento

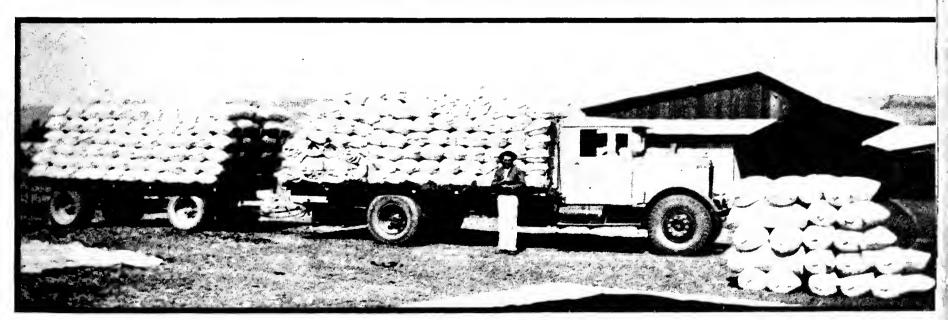


Threshing onion seed at Sacramento

Washing onion seed at San Juan. All onion seed is carefully washed and dried before being milled, in order to remove small particles which cannot be eliminated by milling



Onion seed being dried at San Juan. The seed is spread on huge canvas sheets and is raked over every day until thoroughly dry



Onion seed being loaded for shipment, at San Juan

BUILDING FOR THE FUTURE ON THE IDEALS OF THE PAST

THAS been said that an institution is but the lengthened shadow of one man. The same principles rigidly established by D. M. Ferry and C. C. Morse in the founding of their respective businesses are as rigidly followed today. The same conviction that a seed business to be successful must be built on confidence is continued. Men working for Ferry-Morse have the same zeal for accomplishment with which their predecessors of those early days were imbued.

In only one respect has there been a change. Ferry-Morse Seed Co. have the combined equipment and facilities of two large firms and the benefit of eighty years' experience. They are equipped to meet every possible gardening need and trend.



A section of a bean trial at Oakview



Members of the seed-breeding staff at Oakview noting a trial of California Wonder Peppers



A pea trial at Salinas. When the pods mature, they are picked, measured, counted, and compared



Lettuce trial at Salinas. Each row is noted carefully four or five times during the growing season as well as at maturity



Noting a celery trial at Salinas

SOME OF THE MORE RECENT AWARDS GIVEN FERRY-MORSE SEED CO.

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VEGETABLES

| VEGETABLES | | |
|--|--|--|
| Beet—Good for All | Special Mention, All America, 1932 | |
| Carrot—Morse's Bunching | Award of Merit, All America, 1933 | |
| Cucumber—Straight-8 | Gold Medal, All America, 1934 | |
| Parsley—Paramount | Award of Merit, All America, 1935 | |
| Peas—Duplex | Award of Merit, Royal Horticultural Society, 1931 | |
| Peas—Morse's Market | Award of Merit, Royal Horticultural Society, 1931 | |
| | | |
| FLOWERS | | |
| Larkspur—Giant Imperial White Spire | Award of Merit, Royal Horticultural Society, 1934 | |
| Larkspur—Stock Flowered Rose Queen | Award of Merit, Royal Horticultural Society, 1934 | |
| LARKSPUR—Stock Flowered Deeper Los Angeles | Award of Merit, Royal Horticultural Society, 1934 | |
| PETUNIA—Rose King Improved | Special Mention, All America, 1935 | |
| Stock—Beauty of Nice | Award of Merit, Royal Horticultural Society, 1932 | |
| Stock—Perpetual Branching, Heatham Beauty_ | Award of Merit, Royal Horticultural Society, 1932 | |
| Sweet Peas—All Bright | Gold Medal, Scottish Sweet Pea Society, 1929 | |
| Sweet Peas—Good Cheer | Silver Medal, Scottish Sweet Pea Society, 1929 | |
| SWEET PEAS—Early MarineCertif | ficate of Merit, International Flower Show, New York, 1929 | |
| Sweet Peas-Morse's White Harmony | Silver Medal, National Flower Show, Detroit, 1929 | |
| | Silver Medal, Spring Show, Philadelphia, 1929 | |
| | Certificate of Merit, Spring Show, Chicago, 1929 | |
| Certific | cate of Merit, Commercial Flower Growers of Chicago, 1929 | |
| Sweet Peas—Tranquillity | Award of Merit, British Sweet Pea Society, 1930 | |
| Sweet Peas—Early Apollo | Silver Medal, New York Spring Show, 1930 | |
| | Certificate of Merit, Chicago Garden and Flower Show, 1930 | |
| Sweet Peas—Early Pal | Silver Medal, New York Spring Show, 1930 | |
| Cert | ificate of Merit, Chicago Commercial Flower Growers, 1930 | |
| | Certificate of Merit, Chicago Garden and Flower Show, 1930 | |
| Sweet Peas—Celebrity | Certificate of Merit, Scottish Sweet Pea Society, 1930 | |
| Sweet Peas—Tranquillity | Award of Merit, British Sweet Pea Society, 1930 | |
| Sweet Peas—Early Fortyniner | Certificate of Merit, New York Spring Show, 1930 | |
| Sweet Peas—Early Vogue | Certificate of Merit, Chicago Garden and Flower Show, 1930 | |
| SWEET PEAS—Early GringoCertific | cate of Merit, Commercial Flower Growers of Chicago, 1930 | |
| Sweet Peas—Early Pride | Award of Merit, Holland Horticultural Society, 1931 | |
| · · · · · · · · · · · · · · · · · · · | Award of Merit, Holland Horticultural Society, 1931 | |
| Sweet Peas—Welcome | Silver Medal, Scottish Sweet Pea Society, 1931 | |
| Sweet Peas—Miss Delight | Royal Horticultural Society, 1931 | |
| Sweet Peas—Red Boy | Award of Merit, Royal Horticultural Society, 1932 | |
| | Award of Merit, British Sweet Pea Society, 1932 | |
| | Silver Medal, Scottish Sweet Pea Society, 1933 | |
| Sweet Peas—Early Success | Award of Merit, Holland Horticultural Society, 1934 | |
| | | |

| SWEET PEAS—Early Monterey | Certificate of Merit, New York Spring Flower Show, 1934 |
|---------------------------|---|
| Sweet Peas—Early Memory | Award of Merit, Holland Horticultural Society, 1934 |
| SWEET PEAS—Lullaby | Award of Merit, British Sweet Pea Society, 1934 |
| Sweet Peas—Early Monterey | Certificate of Merit, International Flower Show, New York, 1934 |
| SWEET PEAS—Early Boon | Certificate of Merit, Chicago Commercial Flower Growers, 1935 |
| SWEET PEAS—Bridal Veil | Gold Medal, Scottish Sweet Pea Society, 1935 |
| Sweet Peas—Early Triumph | First Class Certificate, Holland Horticultural Society, 1936 |
| Sweet Peas—Early Mariner | Award of Merit, Holland Horticultural Society, 1936 |
| SWEET PEAS—Early Emblem | Award of Merit, Holland Horticultural Society, 1936 |
| SWEET PEAS—Early Star | Award of Merit, Holland Horticultural Society, 1936 |

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A section of the warehouse at San Juan Bautista, showing seed ready for shipment



A section of the picking room in one of the San Francisco warehouses. All peas, beans, and corn are carefully handpicked



A section of the conveyor, 900 feet long, in one of the Detroit warehouses. More than one million packets are picked out daily during the active packing season

VARIETIES OF VEGETABLES AND FLOWERS ORIGINATED OR INTRODUCED TO THE AMERICAN TRADE BY FERRY-MORSE SEED CO.

BEANS

Challenge Black Wax Detroit Mammoth Lima Detroit Wax

Ferry's Golden Wax Kentucky Wonder

Michigan White Wax

Morse's 191 Nancy D

San Pedro

Seibert's Early Lima

St. Louis Perfection White

Tennessee Green Pod

Unrivaled Wax

BEET

Crimson King
Detroit Dark Red—Ferry's
strain and Morse's strain
Ferry's Crosby
Ferry's Half Long Blood
Good for All
Vermilion Globe

BROCCOLI—Cauliflower Type

November—December
January

February

March—Early
March—Late

April

CABBAGE

Ferry's Hollander Midseason Market Resistant Detroit

CARROT

Chantenay, Red Cored Morse's Bunching

CELERY

Columbia
Crispheart
Florida Golden
Golden Detroit
Golden Pascal
Golden Phenomenal
Non-Bolting Golden Plume
Supreme Golden

CORN

Alpha
Carmel Golden
Charlevoix
Ferry's Early Evergreen
Golden Hulless (Pop Corn)
Mammoth White Cory
Morse's Golden Cream

CUCUMBER

Evergreen White Spine Ferry's Long Green Straight-8

LETTUCE

Chicken
Curly Continuity
Detroit Market Gardeners'
Forcing
Grand Rapids
New York 2-50
New York 41
New York 5084
The Morse
White Boston

MUSKMELON

Defender

Extra Early Osage Gold Nugget

WATERMELON

Ferry's Peerless Morse's Klondike Sweet Heart

ONION

Australian Brown Michigan Yellow Globe Prizetaker

PARSLEY

Paramount

PARSNIP

Short Thick

PEAS

Horsford's Market Garden Laxton's Progress Morse's 200 Morse's Market

SQUASH

Mammoth Summer Crookneck Mammoth White Bush Scallop

TOMATO

Avon Early
Early Detroit
Early Santa Clara Canner
Gulf State Market
Morse's 133-6
Morse's 136-8
Santa Clara Canner

Special Early 498 Supreme Gulf State Market Supreme Marglobe

ANTIRRHINUM—

Rust Resistant

Majus, Terra Cotta Pink Maximum, White Maximum, Yellow Nanum, Golden Orange Nanum, Orange Pink

Nanum, Salmon Pink

ESCHSCHOLTZIA

Autumn Glory Sunlight

LARKSPUR

Lilac King
Stock Flowered—Rose
Queen

SWEET PEAS

116 varieties of Grandiflora and Late Flowering Spencers.

56 varieties of Early Flowering Spencers.

Cupids—a distinct new race, the first Cupid pure white. 15 colors and Grandiflora and Spencer type of flowers developed in them.

PETUNIA

Hybrida—Rose King Improved Rose Bedder



Two hundred thousand attractive red-and-silver displays in the stores of dealers everywhere in the United States make Ferry-Morse Seeds readily available

VISITORS ARE WELCOME AT ANY OF THE FERRY-MORSE ESTABLISHMENTS

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DETROIT, MICHIGAN
328 MONROE AVENUE

OAKVIEW SEED BREEDING STATION
ROCHESTER, MICHIGAN

SAN FRANCISCO, CALIFORNIA
749 FRONT STREET

SAN FRANCISCO, CALIFORNIA
500 PAUL AVENUE

LOS ANGELES, CALIFORNIA
724 EAST 61ST STREET

sacramento, california 1734-34th street

SALINAS SEED BREEDING STATION
SALINAS, CALIFORNIA

SAN JUAN BAUTISTA RANCH
SAN JUAN BAUTISTA, CALIFORNIA

"Nor do I think that men will ever reach the end and far-extended limits of the vegetable kingdom; so incomprehensible is the variety it every day produces, of the most useful and admirable of all the aspectable works of God."

JOHN EVELYN
"A DISCOURSE OF SALLETS"

1620-1706

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